

**CLAIMS**

1. A disk brake, in particular a brake pad having a lining support (1) and a friction lining (3), at least one stud being mounted on the lining support (1) for fixing the friction lining (3), characterized in that the stud (4) passes through the fixing lining (3) from approximately the middle up to the lining surface (5).

2. The disk brake as claimed in claim 1, characterized in that the stud (4) passes right through the friction lining (3).

3. The disk brake as claimed in claim 1 or 2, characterized in that the stud (4) is welded onto the lining support (1).

4. The disk brake as claimed in at least one of claims 1 to 3, characterized in that the stud (4) is made from soft brass.

5. The disk brake as claimed in at least one of claims 1 to 4, characterized in that the stud (4) is made from brass, MS 60.

6. The disk brake as claimed in at least one of claims 1 to 5, characterized in that the stud (4) formed from soft brass is firmly welded, in particular laser welded, to the lining support (1).

7. The disk brake as claimed in at least one of claims 1 to 6, characterized in that the stud (4) made from brass can be welded onto the lining support (1) by means of a

laser welding process, capacitor discharge welding process or drawn arc welding process.

8. The disk brake as claimed in claim 7, characterized in that the stud (4) is welded onto the lining support (1) by means of an automated laser welding process, capacitor discharge welding process or drawn arc welding process, and the stud (4) is designed as a capacitor discharge stud or drawn arc stud.

9. The disk brake as claimed in at least one of claims 1 to 8, characterized in that an underlayer (2) is provided between the lining support (1) and the friction lining (3).

10. The disk brake as claimed in at least one of claims 1 to 9, characterized in that in order to influence the lining surface tension and/or the friction lining compressibility of the friction lining (3) the stud (4) is formed from a stud length ( $L_1$  to  $L_4$ ) which lies in the range from half the thickness  $D_R$  of the friction lining (3) to the full thickness  $D_R$  of the friction lining.

11. The disk brake as claimed in at least one of claims 1 to 10, characterized in that the lining support (1) is formed from a metal plate.

12. A method for the attachment of studs (4) to lining supports (1) for disk brakes, in particular brake pads, the stud (4) being formed from a soft brass material and the lining support (1) from a harder material and the stud (4) being connected to the lining support (1), characterized in

that the stud (4) is welded onto the lining support (1) by a laser welding process, a capacitor discharge welding process or a drawn arc welding process.

13. The method as claimed in claim 12, characterized in that the stud (4) is welded onto the lining support (1) by an automated process.

14. The method as claimed in claim 12 or 13, characterized in that the stud (4) is designed as a capacitor discharge stud or arc drawn stud for welding onto the lining support (1).

15. The method as claimed in at least one of claims 12 to 14, characterized in that the stud (4) is firmly welded to the lining support (1) by the capacitor discharge welding process or the drawn arc welding process, with or without a gas shield.

16. The method as claimed in at least one of claims 12 to 15, characterized in that a length ( $L_1$ ) of the stud (4) is selected, which is equal to at least one half of the thickness ( $D_R$ ) of the friction lining (3) up to the full thickness ( $D_R$ ) of the friction lining (3).

17. The method as claimed in at least one of claims 12 to 16, characterized in that soft brass, in particular MS 60, which is softer than the materials of the friction lining (1) and/or of a brake disk, is used as the stud (4).

18. The method as claimed in at least one of claims 12 to 17, characterized in that the selection of the length

and/or of the diameter (M) of the stud (4) is used to influence the lining surface tension and/or the friction lining compressibility.

19. The method as claimed in at least one of claims 12 to 18, characterized in that the stud (4) is welded onto the lining support (1) and passes right through the underlayer (2) and is at least of a stud length ( $L_1$  to  $L_2$ ) which lies in the range from half the thickness ( $D_R$ ) to the full thickness ( $D_R$ ) of the friction lining (3).